

at right angles and their surface should be protected by a coat of varnish, in order to prevent unprofitable loss of the electric fluid—3. After the operation, ice should be applied to the tumour. This is the first case on record of aneurism cured or even treated by this method, which has been of late employed in the treatment of a large number of diseases." "The coagulating influence of electricity on blood leads us to hope that it will be found as advantageous in external aneurism, and that Dr. Petrequin's case will not long remain a solitary instance of success." *

For the practical application of this remedial agent in the treatment of aneurism, Dr. Petrequin is entitled to the gratitude of the profession, at the same time it is but right to bear in mind that the idea did not originate with him, for years ago, "it has been suggested that galvanism might be applied to the important purpose of coagulating the blood within an aneurismal tumour, and thus removing the disease without resorting to the ligature."† Should it prove as effectual in other hands as it appears to have been in the above case, it will form a new era in the treatment of the ordinary forms of aneurism, and I have no doubt can be made available in that of aneurism by anastomosis.

Great St. James Street, February, 1846.

EXPERIMENTS ON A FEW OF THE MINERAL WATERS OF CANADA.

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MINERAL SPRING AT BERTHIER.

A valuable mineral spring—valuable from its antacid properties dependant on the carbonates which it holds in solution—is met with in the neighbourhood of Berthier, a village situated at the mouth of the river of that name, and about 45 miles from this city, on the northern shore of the St. Lawrence. This spring has been known for many years back, and of such importance was it deemed, that in their deeds of concession the seignors have always held it in reserve. The spring is in reality situated on the river Bayonne, about four miles from Berthier, and at the distance of about 40 feet from its bank. The character of the country is here hilly, but the spring itself is seated on a level district. The soil is very clayey—the scenery beautiful.

In June, 1843, I received some of this water for examination, which had been sent to me for that purpose. The following is the result of the experiments instituted upon it:—

I. Qualitative Analysis.

1. Its specific gravity was determined to be 1.006569,
2. Upon turmeric paper no change was produced; litmus was faintly reddened, its blue being restored by the application of a gentle heat, thus indicating the presence of a gaseous acid.
3. Barytic water caused a copious white precipitate,

completely soluble in nitric acid; affording evidence of the presence of carbonic acid in quantity.

4. Lime water when added, was attended with a similar result.

A quantity of the water was now boiled, to ensure a deposition of those earthy salts which were held in solution by the carbonic acid, which after filtration afforded, with re-agents, the following results.

5. Nitrate of silver threw down a copious white precipitate soluble in ammonia.

6. The addition of chloride of barium was attended with no appreciable effect, thus indicating the absence of sulphuric acid.

7. Oxalate of ammonia threw down a white precipitate, which was oxalate of lime.

8. The addition of phosphate of soda, followed by carbonate of ammonia, with ebullition, was not found to be productive of any effect, thus negating the presence of magnesia.

9. Evaporation to dryness induced an appearance of minute crystallization. These crystals, when examined by the microscope, were cubes, and were doubtless chloride of sodium.

The precipitate of earthy salts obtained by simply boiling the water was next examined. This precipitate was found to be wholly soluble in hydrochloric acid with effervescence. To the clear solution

10. Oxalate of ammonia was added, when a white precipitate ensued, denoting the presence of lime.

11. The liquid having been freed from lime by oxalate of ammonia, was tested by phosphate of soda, and carbonate of ammonia, and boiled. A copious white flocculent precipitate ensued, indicative of the presence of magnesia.

From these qualitative experiments, we are permitted to infer the presence of the following ingredients:—

Experiment 2, 3, 4. Carbonic acid.

" 5. Chlorine.

" 7. Lime.

" 9. Sodium.

" 10. Carbonate lime.

" 11. Carbonate magnesia.

II. Quantitative Analysis.

1. Two fluid ounces were evaporated to dryness, with the precautions detailed in the analogous experiment on the Varennes water. The solid residuum weighed 8.9 grs.

Sixteen fluid ounces were evaporated to four ounces. The earthy salts which precipitated were collected, and finally dissolved in hydrochloric acid.

2. To this solution oxalate of ammonia was added, and the oxalate of lime which fell, being collected and carefully dried, was found to weigh 3.82 grs. This was

* Medical Times, vol. xiii. p. 147 and 148.

† Apjohn Cyclopædia of Pract. Med., Art. Galvanism.